



## EXECUTIVE SUMMARY

Nordic Windpower LLC (NWP) is a startup manufacturer of utility-scale wind turbines. NWP's objective is to manufacture and sell low-cost, high-reliability turbines in North America, using a proven Swedish technology with demonstrated high reliability and low cost of energy production. NWP is seeking a strategic partner experienced in just-in-time assembly and supply chain management with which to implement its business plan.

This opportunity offers the following:

- An excellent market opening in a rapidly growing industry
- A proven, reliable technology with strong competitive advantages
- A team very strong in the wind industry
- A highly capital-efficient business model, offering a rare investor opportunity to enter the industry and achieve venture scale returns with minimal market or technology risk
- Manageable risks
- Attractive exits

**MARKET.** The global wind industry has grown at an average rate of 20-25% per year since 1990; \$½ trillion is slated to be invested in the US alone by 2020. Furthermore, the robust demand for wind turbines has created a supply shortfall in North America of approximately 1,000 MW (roughly US\$1.5b) per year, in spite of a 30-50% increase in prices in the last 18 months.

**NORDIC WIND TURBINE TECHNOLOGY.** The Nordic wind turbine was developed with a US\$75m R&D investment by the Swedish gov't, devoted to producing a high-reliability, low-cost technology. It utilizes a proprietary, teeter-hub design which dissipates turbulent & eccentric loads harmlessly, before they reach the drive train. This gives the Nordic turbine a significant advantage in reliability, weight, cost of installation, and cost of maintenance. In comparison to most commercial wind turbines, the Nordic has a 10% to 50% advantage in the customer's bottom line: cost of energy produced.

NWP is the exclusive North American manufacturer of the Nordic products. It was founded and is owned by the Princeton Energy Group, a leading developer of renewable energy projects worldwide, and Deltawind AB, the Swedish owners of the technology. The European technology providers are providing operational support as NWP ramps up its operations.

**NWP MANAGEMENT TEAM.** NWP is led by people with long experience in the wind industry, including:

- STEVE TABER – Chairman & CEO of Princeton Energy Group companies. Extensive renewable energy industry experience, including projects in the US, Latin America, Europe, and Asia.
- DR. JIM WALKER – Vice Chairman & former CEO of enXco. Member of the Board of the American Wind Energy Association, adviser to the White House on wind energy policy.
- URBAN JOELSSON - Co-founder & CEO of Deltawind AB. Previously founded and managed GenerPro AB.
- DR. MIKE ROBINSON - Managing Director of API Engineering, a UK-based energy services company. Former President of Deltawind's predecessor company.

**RISKS.** NWP has designed its business model to mitigate risks and to withstand business cycles and setbacks. NWP anticipates the following risks going forward:

- PRODUCT FAILURE. This risk is mitigated by deploying a simple, reliable, proven design and using world-class suppliers for key components (esp. gearboxes and blades).
- MARKET CYCLES. This risk is mitigated by outsourcing all components, deploying little fixed capital & a lean staff. A low sales volume is required to break even.
- PRICE COLLAPSE (as a result of technological obsolescence or a market share/price war). The Nordic design is itself market-disruptive, and competing innovations are likely to increase complexity. This risk is also mitigated by NWP's current cost advantage, by focusing on niche markets with limited competition, and by deploying new products now in the R&D pipeline.
- COLLECTION LOSS/UNSOLD INVENTORY. This risk is mitigated by ensuring that the full EPC price is committed by the lender as of the order and by purchasing components only when an order is received (little parts or product inventory - just-in-time product flow).
- SUPPLY CHAIN DISRUPTIONS. This most important risk is mitigated by working with world-class component suppliers with a long history with the Nordic technology, as well as by a laser management focus on this issue.

**COST OF MARKET ENTRY.** NWP offers a rare opportunity to enter the wind turbine business relatively inexpensively. Just developing a commercial wind turbine technology (without manufacturing startup costs) requires roughly US\$30MM and 3 to 5 years. NWP can deploy a market-ready product with no R&D investment, little capital plant, and no inventory to finance. For this reason, "venture scale" returns on this investment are well within reach, with little technology or market risk.

**EXIT STRATEGY.** The European public markets have placed high values on wind companies, including Suzlon (€7b market cap), Gamesa (€3.6b market cap), and Clipper (€490m market cap pre-manufacturing). In addition, recent acquisitions in the wind industry by GE, Siemens, Vestas, Goldman-Sachs, AES, & EDF suggest a potentially strong market for a private sale.